# INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01Q1/38 H01Q1/24 H01Q5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

 $\begin{array}{ll} \text{Minimum documentation searched (classification system tollowed by classification symbols)} \\ \text{IPC 7} & \text{H01Q} \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
X	PUES H F ET AL: "AN IMPENDANCE-MATCHING TECHNIQUE FOR INCREASING THE BANDWIDTH OF MICROSTRIP ANTENNAS" IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, IEEE INC. NEW YORK, US, vol. 37, no. 11, 1 November 1989 (1989-11-01), pages 1345-1354, XP000100599 ISSN: 0018-926X paragraph 'VI.A.!; figure 6	1-7			
X	US 4 445 122 A (PUES HUGO F) 24 April 1984 (1984-04-24) column 3, line 3 - line 27; figures 1,2	1-7			
X	EP 0 469 779 A (SONY CORP) 5 February 1992 (1992-02-05) figures 1-3	1			

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:      A* document defining the general state of the art which is not considered to be of particular relevance      E* earlier document bul published on or after the international filling date      C* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)      O* document referring to an oral disclosure, use, exhibition or other means      P* document published prior to the international filling date but later than the priority date claimed	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
8 November 2004	17/01/2005
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Kaleve, A

### INTERNATIONAL SEABUR REPUR

International Application No

	4/051471					
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.			
Х	KRAUSS, J.D.: "Antennas" 1988, MCGRAW-HILL , USA , XP002304444 page 740, paragraph 2 - page 741, paragraph 1; figures 16-25		1			
A	EP 1 152 482 A (NOKIA MOBILE PHONES LTD) 7 November 2001 (2001-11-07) figures 2,7		4,6,7			
A	US 2003/043081 A1 (ACHIM HILGERS) 6 March 2003 (2003-03-06) paragraph '0002!; figures 1,2		4,6,7			
A	US 5 604 507 A (OPENLANDER WAYNE R) 18 February 1997 (1997-02-18)		1			
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EP 0469779	A	05-02-1992	JP JP JP AU AU DE DE EP US	2821647 B2 4086101 A 2821648 B2 4088702 A 642756 B2 8132191 A 69131660 D1 69131660 T2 0469779 A2 5233360 A	05-11-1998 18-03-1992 05-11-1998 23-03-1992 28-10-1993 06-02-1992 04-11-1999 06-04-2000 05-02-1992 03-08-1993
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